

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

FUNDAMENTAL INNOVATION
SYSTEMS INTERNATIONAL LLC,

Plaintiff,

v.

ZTE CORPORATION, ZTE (USA), INC.
and ZTE (TX), INC.,

Defendants.

Case No. 3:17-cv-01827-N

JURY TRIAL DEMANDED

**PLAINTIFF'S REPLY IN SUPPORT OF ITS
MOTION FOR PARTIAL SUMMARY JUDGMENT**

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I. INTRODUCTION

ZTE's opposition fails to identify any *factual* dispute that precludes summary judgment. ZTE relies exclusively on legal arguments that are not supported by the controlling precedent. Accordingly, Fundamental respectfully requests that the Court grant Fundamental's motion for summary judgment.

First, with respect to IPR estoppel, ZTE does not dispute that it could have raised the Dougherty and Shiga references in its 00111 IPR Petition against the '550 patent, which was fully instituted and resulted in a final written decision ("FWD") upholding the validity of the challenged claims. Instead, ZTE argues that because its separate 00110 IPR Petition was not instituted, estoppel does not apply to the grounds raised in that petition. ZTE is wrong as a matter of law. Section 315(e)(2) is clear that estoppel applies to grounds that were raised or reasonably could have been raised *in the petition that resulted in a FWD*. Indeed, the *Zitovault* case from this District, which Fundamental cited in its opening brief, found estoppel in precisely the same circumstances present here. *Zitovault v. Int'l Bus. Mach. Corp.*, No. 3:16-cv-962, 2018 WL 2971178, at *3-4 (N.D. Tex. Apr. 4, 2018) (applying estoppel to prior art raised in a second, non-instituted petition based on the issuance of a final written decision in a first instituted petition). The cases that ZTE relies on do not compel a different result, but instead narrowly hold that estoppel does not apply to non-instituted grounds in a partial institution decision, *i.e.*, where certain grounds in a petition are instituted and other grounds *in the same petition* are not. Simply put, the PTAB's decision on ZTE's 00110 IPR Petition is irrelevant to the scope of estoppel resulting from the FWD on the 00111 IPR Petition.

Second, with respect to obviousness, ZTE tacitly concedes that there is no disclosure in the Theobald or Shiga references that teaches critical limitations of the '111 and '766 patents—specifically, an “identification signal . . . configured to indicate to the mobile device that the

power socket is not a USB host or hub” (’111 patent) and a “charging subsystem enabled to draw current unrestricted by at least one predetermined USB Specification limit” (’766 patent). ZTE doubles down on Dr. Shoemake’s conclusory assertions that a person of ordinary skill in the art *would* modify the prior art to include these limitations, but cannot identify any specific opinions explaining *why* a person of ordinary skill in the art would modify the prior art in that way, much less provide the evidentiary support necessary to create a genuine dispute of fact. ZTE’s bare assertions that Dr. Shoemake’s opinions are not conclusory and not based on hindsight, without more, cannot defeat summary judgment.

II. THE PTAB’S FINAL WRITTEN DECISION ON ZTE’S 00111 IPR PETITION ESTOPS ALL OF ZTE’S INVALIDITY THEORIES FOR THE ’550 PATENT¹

ZTE does not dispute that the PTAB instituted all grounds raised in the 00111 IPR Petition against the ’550 patent and rendered a FWD upholding the validity of every claim. *See* Dkt. 195 at 2 (acknowledging that “the Board instituted one *inter partes* review proceeding on the Fischer ’550 patent” and “issued a final written decision affirming the patentability of the claims”). Nor does ZTE dispute that it was aware of the Dougherty and Shiga references when it filed the 00111 IPR Petition, and thus reasonably could have raised invalidity based on Dougherty and Shiga in that petition. *See* Dkt. 181 at 6 (noting that ZTE identified Dougherty and Shiga in its invalidity contentions three days before filing the 00111 IPR Petition). These facts give rise to estoppel under the plain language of Section 315(e)(2), which applies to “any ground that the petitioner raised or reasonably could have raised *during that inter partes*

¹ Fundamental does not expressly respond to the “Factual Background” section of ZTE’s opposition because ZTE does not purport to identify any factual disputes that preclude summary judgment. *See* Dkt. 195 at 1-4. Indeed, ZTE’s summaries of the IPR petitions and the asserted prior art are generally consistent with Fundamental’s summaries from its opening brief, and any disputes are not material to the present motion. Fundamental does not agree with ZTE’s *characterizations* of Dr. Shoemake’s obviousness opinions, however, as discussed in detail in Section III, *infra*.

review.” 35 U.S.C. § 315(e)(2) (emphasis added); *see also Zitovault*, 2018 WL 2971178, at *3-4; Dkt. 181 at 9-12.

Instead, ZTE argues in its opposition that estoppel should not apply to Dougherty and Shiga because the PTAB did not institute ZTE’s separately filed 00110 IPR Petition. Relying on *Shaw Industries Group, Inc. v. Automated Creel Systems, Inc.*, 817 F.3d 1293 (Fed. Cir. 2016), ZTE argues that the PTAB’s denial of institution of the 00110 IPR Petition limits the scope of estoppel arising from the FWD in the 00111 IPR Petition. *See* Dkt. 195 at 7-10. ZTE is incorrect. Indeed, Fundamental anticipated ZTE’s arguments in its opening brief and explained why *Shaw*’s narrow holding does not apply in this case, and why the 00110 IPR Petition does not limit the scope of estoppel. Dkt. 181 at 12-14. Nothing raised in ZTE’s opposition compels a different conclusion.

A. The PTAB’s Denial of Institution on the 00110 IPR Petition Is Irrelevant

ZTE erroneously argues that the PTAB’s denial of institution on the **00110** IPR Petition limits the scope of estoppel for the **00111** IPR Petition. ZTE’s position, however, is not supported by any of the cases that it cites, and is both inconsistent with the plain language of the estoppel statute and contrary to the policy and purpose of IPR estoppel.

Section 315(e)(2) plainly states that a FWD in an IPR proceeding estops the petitioner from asserting invalidity in district court on any ground that was raised or could have been raised in the same proceeding:

The petitioner in *an inter partes review . . . that results in a final written decision* under section 318(a) . . . may not assert either in a civil action . . . or in a proceeding before the International Trade Commission . . . that the claim is invalid on any ground that the petitioner raised or reasonably could have raised *during that inter partes review*.

35 U.S.C. § 315(e)(2) (emphases added). By its plain language, Section 315(e)(2) does not limit estoppel based on what the petitioner raised or could have raised in *separate* IPR petitions or

proceedings. ZTE does not even address the statutory language in its brief, much less offer any plausible interpretation that would limit the scope of estoppel in one proceeding based on an institution decision in a second proceeding.

This District has confirmed Fundamental’s interpretation of Section 315(e)(2) in *Zitovault*. In *Zitovault*, the defendants challenged a patent in two separate IPR proceedings—one that was instituted and resulted in a FWD affirming the validity of all challenged claims, and one that was not instituted. 2018 WL 2971178, at *1. The plaintiff moved for summary judgment on all of the defendants’ invalidity grounds based on IPR estoppel pursuant to Section 315(e). *Id.* In opposing the motion, the defendants argued, as ZTE does here, that estoppel should not apply to the grounds raised in the second petition because those grounds were denied institution. *See* Adickman Decl. Ex. 15 (Zitovault Reply Brief) at App. 001199 (“IBM contends that the procedural exclusion of the grounds raised in its second IPR petition saves almost its entire invalidity case”). The Court rejected this argument, holding that because the defendants “reasonably could have raised” those grounds in their first petition, estoppel applies notwithstanding the PTAB’s denial of institution of the second petition. *See Zitovault*, 2018 WL 2971178, at *4.

ZTE does not address this aspect of the *Zitovault* decision in its opposition brief,² and none of the other cases cited by ZTE support its proposition that estoppel does not apply to a ground raised in *any* petition that was not instituted—even if the petition that resulted in a FWD was fully instituted. Primarily, ZTE relies on *Shaw*. As explained in Fundamental’s opening brief, however, *Shaw* crafted a narrow exception to estoppel that applies only in cases of partial

² ZTE contends that estoppel in *Zitovault* was limited to “prior art references that [the defendants] knew about, but did *not* include in their IPR petition” (Dkt. 195 at 13), which is clearly incorrect.

institution—*i.e.*, where the PTAB institutes an IPR on some grounds raised in a petition, but declines to institute on other grounds raised in the *same* petition. *See* Dkt. 181 at 9-11.³ Because there is no dispute that the 00111 IPR Petition was instituted in its entirety, *Shaw* does not apply to the facts of this case.

As numerous courts have recognized, *Shaw*'s holding was limited to the “unique procedure” of partial institution.⁴ *Trustees of Columbia Univ. in the City of N.Y. v. Symantec Corp.*, 390 F. Supp. 3d 665, 679 (E.D. Va. 2019); *see also, e.g., Oil-Dri Corp. of Am. v. Nestle Purina Petcare Co.*, No. 15-cv-1067, 2017 WL 3278915, at *4 (N.D. Ill. Aug. 2, 2017) (estoppel under *Shaw* applies “if the PTAB institutes IPR on some grounds but declines to institute on others”); *iLife Techs., Inc. v. Nintendo of Am., Inc.*, No. 3:13-cv-4987-M, 2017 U.S. Dist. LEXIS 87769, at *19 (N.D. Tex. May 30, 2017) (finding that *Shaw* was limited to the unique procedural circumstances of that case). And *Shaw*'s holding was essentially rendered moot by the Supreme Court's subsequent ruling in *SAS Institute, Inc. v. Iancu*, which eliminated the practice of partial institutions entirely. 138 S. Ct. 1348, 1355, 1359-60 (2018). Indeed, in *SAS Institute* the Supreme Court expressly recognized that the scope of an IPR (and, by extension, the scope of

³ *Shaw* involved an appeal from the PTAB's FWD in an IPR proceeding, where the PTAB had rendered a partial institution and declined to institute certain grounds in the petition for procedural reasons. *See Shaw*, 817 F.3d at 1296-97. The Federal Circuit held, *inter alia*, that the PTAB's partial institution decision was proper and denied the petitioner's request for a writ of mandamus instructing the PTAB to institute IPR as to all petitioned grounds. *Id.* at 1299-1300. Of particular relevance here, the Federal Circuit noted that mandamus relief was not justified because the petitioner could assert the non-instituted grounds in future proceedings, explaining that the petitioner “could not have reasonably raised” the non-instituted grounds “during the IPR.” *Id.* at 1300.

⁴ Although a minority of courts have found *Shaw* to apply to grounds that were not even *raised* in an IPR petition, courts in this District have rejected that view, and even ZTE does not appear to adopt or advocate for such a broad reading of *Shaw*. *See iLife*, 2017 U.S. Dist. LEXIS 87769, at *17-18 (declining to apply *Shaw* to non-petitioned grounds); *see also, e.g., Trustees*, 390 F. Supp. 3d at 679 (noting that a “majority of courts . . . have confined *Shaw* to its procedural posture”).

estoppel) is defined by the IPR petition, and cannot be unilaterally modified by the PTAB.⁵ *Id.* at 1355. Because the 00111 IPR Petition was fully instituted,⁶ *Shaw* is inapplicable to this case.

ZTE cites two other Federal Circuit cases—*HP Inc. v. MPHJ Tech. Invs., LLC*, 817 F.3d 1339 (Fed. Cir. 2016) and *Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309 (Fed. Cir. 2016)—both of which, like *Shaw*, involved appeals from FWDs following partial institution decisions and do not apply to the facts of this case. The district court cases cited by ZTE similarly hold only that non-instituted grounds in a partial institution decision do not give rise to estoppel. Tellingly, ZTE does not cite a single case decided after *SAS Institute* in support of its argument—because the elimination of partial institutions has rendered *Shaw* inapplicable.⁷

ZTE identifies two additional cases from other districts—both decided pre-*SAS Institute*—that purportedly address the question of estoppel across multiple IPR petitions. Neither case, in fact, supports ZTE’s conclusion that denial of institution in *any* petition precludes application of IPR estoppel. First, ZTE contends that *Verinata Health, Inc. v. Ariosa Diagnostics, Inc.* involved multiple petitions, and that the Northern District of California did not

⁵ Fundamental explained in its opening brief how *SAS Institute* “severely limited” the applicability of *Shaw* and determined that the scope of an IPR is determined by the petition. *See* Dkt. 181 at 13-14. ZTE does not even mention *SAS Institute* in its opposition, much less attempt to distinguish it.

⁶ The PTAB’s institution decision was rendered *after* the Supreme Court decided *SAS Institute*, thus partial institution was not even an option.

⁷ ZTE cites *California Inst. of Tech. v. Broadcom Ltd.*, No. CV 16-3714 GW (AGRX), 2018 WL 7456042 (C.D. Cal. Dec. 28, 2018)—decided after *SAS Institute*—in support of the proposition that a petitioner cannot reasonably raise an invalidity ground that is rejected by the PTAB in its institution decision. *See* Dkt. 195 at 10. In fact, however, the *Caltech* court went on to find that in view of *SAS Institute*, “the factual circumstances encountered by *Shaw* (partial denial of institution of IPR as to a particular ground, with that denial unappealable) are unlikely to result again,” so that “the choices of the petitioner – and the petitioner alone – in its initial decision regarding what grounds to bring before the PTAB dictate what grounds are raised (or reasonably could have been raised) ‘during IPR’ and thus could result in estoppel if IPR results in a final written decision.” *Id.* at *7.

estop the defendants on invalidity grounds that had not been instituted. No. 12-cv-5501, 2017 WL 235048 (N.D. Cal. Jan. 19, 2017); *see also* Dkt. 195 at 11. In fact, however, **both** petitions in *Verinata Health* raised the same three grounds of invalidity; the two petitions merely addressed different subsets of claims. *See* Adickman Decl. Ex. 16 (IPR2013-00276 Institution Decision) at App. 001209; Adickman Decl. Ex. 17 (IPR2013-00277 Institution Decision) at App. 001232. The PTAB rendered a partial institution decision on **both** petitions, electing to proceed on only one of the three grounds. *See* Adickman Decl. Ex. 16 at App. 001224-25; Adickman Decl. Ex. 17 at App. 001247-48. Thus, the court's decision not to estop the defendants from pursuing the non-instituted invalidity grounds was based on the fact that the grounds were excluded by the PTAB's partial institution (as in *Shaw*), not because they were denied institution in a separate petition.⁸ Similarly, ZTE contends that *Milwaukee Electric Tool Corp. v. Snap-On Inc.* involved three IPR petitions, but did not apply estoppel to grounds that were not instituted. 271 F. Supp. 3d 990 (E.D. Wis. 2017); *see also* Dkt. 195 at 11. Like *Verinata*, *Milwaukee Electric* is distinguishable because all three petitions reached a FWD after a partial institution—and thus the unique procedural circumstances of *Shaw* applied. *See* 271 F. Supp. 3d at 1027. The same is not true here.

As Fundamental explained in its opening brief, ZTE's argument that estoppel should not apply to grounds raised in a second, non-instituted petition runs contrary to the policy and purpose of IPR estoppel. *See* Dkt. 181 at 11-13. ZTE's opposition fails to address this issue at all. Importantly, as courts have recognized, IPRs were intended to establish "establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary

⁸ *Verinata* is also distinguishable because it adopted the broad view of *Shaw* as "limiting IPR estoppel to grounds actually instituted." 2017 WL 235048, at *3. As noted above, the majority of courts (including courts in this district) have rejected that reading of *Shaw*.

and counterproductive litigation costs.” *MCM Portfolio LLC v. Hewlett-Packard Co.*, 812 F.3d 1284, 1290-91 (Fed. Cir. 2015). In order to fulfill that purpose, “a petitioner cannot be left with the option to institute a few grounds for IPR while holding some others in reserve for a second bite at the invalidity apple once in the district court.” *Milwaukee Elec.*, 271 F. Supp. 3d at 1029. If, as ZTE claims, estoppel does not apply to invalidity grounds raised in *any* petition that is denied institution, then petitioners would be encouraged to file serial petitions, intending their later petitions to be denied institution in order to inoculate that art against estoppel and preserve invalidity grounds for use at trial. *See, e.g., Parallel Networks Licensing, LLC v. Int’l Bus. Mach. Corp.*, No. 13–2072, 2017 WL 1045912, at *12 (D. Del. Feb. 22, 2017) (“Allowing IBM to raise arguments here that it elected not to raise during the IPR would give it a second bite at the apple and allow it to reap the benefits of the IPR without the downside of meaningful estoppel.”). Such a practice runs contrary to the purpose of the *inter partes* review system and IPR estoppel.

B. ZTE Reasonably Could Have Raised Dougherty and Shiga in Its 00111 IPR Petition

ZTE’s assertion that it could not have reasonably raised Dougherty and Shiga in IPRs is based solely on the PTAB’s denial of the 00110 IPR Petition. *See, e.g.,* Dkt. 195 at 14 (“ZTE attempted to raise that ground, but the attempt was denied by the PTAB’s unreviewable decision not to institute the petition.”). ZTE does not dispute that it *could have* raised Dougherty and Shiga in the 00111 IPR Petition. Indeed, had ZTE done so, the PTAB could not have declined to institute on the Dougherty/Shiga grounds because *SAS Institute* would have mandated an all-or-nothing institution decision. As a result, the Dougherty/Shiga grounds would have been included in the instituted 00111 IPR proceeding, and would have been part of the FWD in that proceeding.

ZTE suggests that it could not include all of its invalidity grounds in a single petition because “it is often simply not feasible to include all arguments in a single petition” and “multiple petitions are sometimes reasonably required.” Dkt. 195 at 12. ZTE, however, does not provide any reason why *in this case* multiple petitions were “reasonably required.” The PTAB itself has noted that multiple petitions should only be permitted under rare circumstances. In the July 2019 update to the PTAB’s Trial Practice Guide, the PTAB expressly added a section addressing “Parallel Petitions Challenging the Same Patent.” *See* Adickman Decl. Ex. 18 (PTAB Trial Practice Guide Update July 2019) at App. 001275.⁹ In that section, the PTAB explained, “Based on the Board’s prior experience, one petition should be sufficient to challenge the claims of a patent in most situations.” *Id.* “Two or more petitions filed against the same patent at or about the same time . . . may place a substantial and unnecessary burden on the Board and the patent owner and could raise fairness, timing, and efficiency concerns,” and “are not necessary in the vast majority of cases.” *Id.* Indeed, the PTAB noted that “a substantial majority of patents have been challenged with a single petition.” *Id.* Multiple petitions may only be warranted under the “rare” circumstances where “the patent owner has asserted a large number of claims in litigation or when there is a dispute about priority date requiring arguments under multiple prior art references”—neither of which applies to the ’550 patent.¹⁰ *Id.* ZTE does not identify any such “rare” circumstances that would apply here. In fact, the parties did not raise any disputes over priority dates, ZTE’s petitions only challenged 18 claims, and both of ZTE’s petitions were

⁹ *See also Office Patent Trial Practice Guide, July 2019 Update*, 84 Fed. Reg. 33,925-26 (July 16, 2019) (adopting July 2019 update).

¹⁰ The July 2019 update also requires a petitioner who files parallel petitions challenging the same patent to submit a separate paper ranking the petitions and explaining the differences between the petitions and why the PTAB should institute more than one petition. *Id.* at App. 001276.

well below the 14,000 word limit. *See generally* Adickman Decl. Ex. 3, App. 000385-451 (00111 IPR Petition); Adickman Decl. Ex. 6, App. 000508-576 (00110 IPR Petition).

Further, even if ZTE could not feasibly have raised the Dougherty/Shiga grounds in the 00111 IPR Petition due to space constraints, ZTE could have sought joinder of the two petitions in order to ensure a consistent and complete institution decision. 37 C.F.R. § 42.122(b) allows a petitioner to request joinder of multiple proceedings “no later than one month after the institution date of any *inter partes* review for which joinder is requested.” The PTAB has also expressly held that joinder is permitted for petitions that assert different grounds of invalidity. *See Zitovault*, 2018 WL 2971178, at *3 (citing cases). Here, the PTAB rendered its institution decision on the 00111 IPR Petition and the 00110 IPR Petition *after SAS Institute* was decided. *See* Adickman Decl. Ex. 4 (00111 Institution Decision) at App. 000452 (bearing a date of May 9, 2018); Adickman Decl. Ex. 7 (00110 Institution Decision) at App. 000577 (bearing a date of May 8, 2018). During that interim, before the PTAB denied institution of the 00110 IPR Petition, ZTE could have requested joinder of the 00110 IPR Petition to the 00111 IPR Petition to ensure that the PTAB would move forward in a single proceeding and avoid the risk that one petition would be instituted, and the other would not. Having opted not to do so, ZTE cannot now claim that it could not have reasonably raised Dougherty and Shiga in the 00111 IPR Petition.

Accordingly, the Court should find that ZTE is estopped from raising Dougherty and Shiga against the ’550 patent. Because those are the only grounds that ZTE has asserted against the ’550 patent, partial summary judgment of validity as to the ’550 patent should be granted.

III. DR. SHOEMAKE’S CONCLUSORY OPINIONS ON OBVIOUSNESS DO NOT RAISE A MATERIAL ISSUE OF FACT FOR TRIAL

Fundamental requests summary judgment of non-obviousness for the Theobald and Shiga combination because ZTE and Dr. Shoemake fail to show that this proposed combination of prior art would include a core limitation of each asserted claim of the ’111 and ’766 patents. Specifically, Dr. Shoemake fails to show how or why the combination would include an *“identification signal [that] is configured to indicate to the mobile device that the power socket is not a USB host or hub,”* as required by the claims of the ’111 patent, or a *“charging subsystem enabled to draw current unrestricted by at least one predetermined USB Specification limit,* said enablement being responsive to an abnormal USB data condition detected at said USB communication path” as required by the claims of the ’766 patent. Indeed, Dr. Shoemake readily admitted that neither Theobald nor Shiga teach these limitations, and he did not identify any facts in the record to support modifying the references to incorporate these limitations. His conclusory opinions that these limitations are met are based purely on hindsight and cannot preclude summary judgment. *See Cheese Sys., Inc. v. Tetra Pak Cheese & Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013).

ZTE’s opposition does not address these specific limitations or identify any genuine support for Dr. Shoemake’s conclusory opinions in the record. For example, ZTE points to different claim limitations that are purportedly taught in the references, such as a USB connector, without discussing the challenged limitations. *See, e.g.*, Dkt. 195 at 14 (“Dr. Shoemake testified that one skilled in the art would have understood [alternative embodiments of Theobald] to include the USB connector”). ZTE also asserts that Fundamental “mischaracterizes” Dr. Shoemake’s deposition testimony (Dkt. 195 at 14), but never explains which testimony was mischaracterized or how, and posits that Dr. Shoemake’s testimony is “grounded in

unambiguous prior art disclosures” (*id.* at 18) without identifying any such disclosures that are relevant to the limitations at issue. Because Dr. Shoemake’s unsupported, conclusory opinions are the *only* “evidence” ZTE identifies for the challenged limitations, no reasonable jury could find that the claims of the ’111 and ’766 patents are obvious over the Theobald/Shiga combination. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016).

A. ZTE Concedes That Theobald and Shiga Do Not Disclose the Challenged Limitations

ZTE does not dispute that neither Theobald nor Shiga expressly discloses an identification signal that indicates that a power socket is not a USB host or hub or a charging subsystem that can draw current in excess of USB 2.0 limits in response to an abnormal data condition. Indeed, Dr. Shoemake admitted in his expert report that Theobald lacks these disclosures, and admitted at his deposition that Shiga does not disclose using its “fourth mode” signal to identify a power source or exceed USB 2.0 current limits. *See* Adickman Decl. Ex. 2 at App. 000304 (¶ 149), App. 000343 (¶ 336); Adickman Decl. Ex. 8 at App. 000727-000728 (137:19-138:25), App. 000693-000694 (103:19-104:10). In its opposition, ZTE does not purport to identify any disclosures in Theobald or Shiga that expressly disclose these limitations, and thus concedes that they are not literally present.

B. ZTE Fails to Identify Any Evidence That the Theobald/Shiga Combination Would Include the Challenged Limitations

Because Theobald and Shiga do not expressly disclose the disputed limitations, ZTE’s obviousness theory cannot succeed absent evidence providing “some reason why one of skill in the art would modify the prior art to obtain the claimed invention.” *Nike, Inc. v. Adidas AG*, 812

F.3d 1326, 1335 (Fed. Cir. 2016), *overruled on other grounds*, *Aqua Prods., Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017).¹¹

ZTE vaguely cites to Dr. Shoemake’s expert report and deposition testimony in support of its obviousness theory but fails to identify *any* opinions that specifically address why a person of ordinary skill in the art would modify the combination of Theobald and Shiga to include an identification signal that identifies different types of power sources, or a charging subsystem that does not comply with USB 2.0 current limits. ZTE’s omission is particularly problematic because Theobald teaches *away* from the proposed combination by disclosing that communications between the mobile device and a connected accessory should adhere to the communication protocol used in the device. *See* Adickman Decl. Ex. 11 at App. 001080 (6:4-13). Indeed, Dr. Shoemake admitted that Theobald does not suggest deviating from a communication protocol (such as USB). Adickman Decl. Ex. 8 at App. 000651-000652 (61:15-62:12). Thus, even if Theobald were modified to support USB, Theobald’s teachings would lead a person of ordinary skill in the art to comply with the USB specification—obviating the need for an “identification signal” or “abnormal data condition” that identifies a non-USB host or hub device that can exceed USB power limits. Because this teaching in Theobald “undermine[s] the

¹¹ Although ZTE purports to distinguish *Nike* based on the ultimate finding that the claims in question were obvious, it does not dispute the standard articulated by the Federal Circuit, which requires the party challenging validity to provide evidence that a person of ordinary skill in the art would combine the prior art references to include the limitations not expressly disclosed in those references. This is consistent generally with the law of obviousness, which requires the party asserting invalidity to prove that a person of ordinary skill in the art would be motivated to combine the prior art in a manner that arrives at the claimed invention. *See ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012) (“To invalidate a patent claim based on obviousness, a challenger must demonstrate ‘by clear and convincing evidence that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.’”) (quoting *Procter & Gamble Co. v. Teva Pharms. USA, Inc.*, 566 F.3d 989, 994 (Fed. Cir. 2009))).

very reason being proffered as to why a person of ordinary skill would have combined the known elements,” “[a]n inference of nonobviousness is especially strong.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009).

The arguments raised in ZTE’s opposition fail to address this critical flaw in Dr. Shoemake’s reasoning, and instead focus on other limitations that are not presently in dispute. For example, ZTE argues that Dr. Shoemake testified that Theobald “teaches fast-charging at 8.6 volts and 850 milliamps” and “suggests his invention could be used with any suitable multi-pin connector,” such as a USB connector. Dkt. 195 at 14-15. ZTE also argues that Dr. Shoemake opined that “Shiga taught using the abnormal SE1 signal to indicate a nonstandard USB feature.” *Id.* at 15. None of these opinions, even if correct, is sufficient to bridge the “logical chasm” between the prior art and the claimed invention. *St. Jude Med., Inc. v. Access Closure, Inc.*, 729 F.3d 1369, 1381 (Fed. Cir. 2013). As Theobald clearly states, and Dr. Shoemake readily admitted, the specific voltages and currents used in Theobald’s fast rate and mid rate chargers are illustrative examples for use in the disclosed embodiment using a J3 connector, and are consistent with the J3 communication protocol. *See* Adickman Decl. Ex. 11 (Theobald) at App. 1079 (4:44); Adickman Decl. Ex. 8 (Shoemake 8/14 Dep. Tr.) at App. 000755-759 (165:7-169:8). Nothing in Theobald, Shiga, or Dr. Shoemake’s expert report explains why a person of ordinary skill in the art would modify Theobald to use USB, while continuing to use the charging voltage and current designed for a J3 connector as opposed to the voltage and current limitations in the USB specification. Unless one of ordinary skill abandons Theobald’s express teaching to comply with the relevant communication protocol, there is simply no need for Shiga’s “fourth mode” signaling to indicate a non-USB host or hub that is not restricted by USB power limits.

ZTE's reliance on *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) is equally misplaced. ZTE mischaracterizes Fundamental's position as arguing that the combination of Theobald and Shiga is not obvious because "Theobald did not specifically mention USB, and Shiga did not address battery charging." Dkt. 195 at 15. The issue is not whether Theobald or Shiga disclose USB or battery charging generally; it is that *even if* Theobald were modified to use USB, there is no reason why the modified Theobald system would intentionally deviate from the USB specification. ZTE fails to identify any evidence (in the prior art references themselves or otherwise) or any specific opinions from Dr. Shoemake that address this substantial difference between the prior art and the claimed invention. The Federal Circuit has expressly cautioned that under these circumstances, "we must guard against 'hindsight bias' and '*ex post* reasoning'" and should reject a claim of obviousness. *St. Jude*, 729 F.3d at 1381. ZTE's generic citation to the entirety of Dr. Shoemake's invalidity analysis, along with vague assertions that "Dr. Shoemake's invalidity testimony is detailed and thorough," cannot defeat summary judgment. *See, e.g., ActiveVideo*, 694 F.3d at 1327-28 (affirming JMOL of nonobvious where expert "fail[ed] to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way the claimed invention does*").¹²

¹² To the extent that ZTE is relying on common sense or "ordinary creativity" (*see* Dkt. 195 at 15) to bridge the gap between the prior art and the claimed invention, ZTE must offer more than generic statements and conclusory, unspecific expert testimony. As the Federal Circuit recently reiterated, "[O]ur cases repeatedly warn that references to 'common sense'—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified." *DSS Tech. Mgmt., Inc. v. Apple Inc.*, 885 F.3d 1367, 1374 (Fed. Cir. 2018) (quoting *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1362 (Fed. Cir. 2016)); *see also id.* at 1376 (finding that expert's "conclusory statements and unspecific expert testimony" were insufficient to support a finding of obviousness).

C. The PTAB's Institution Decision Confirms the Flaw in ZTE's Obviousness Theory

As explained in Fundamental's opening brief, the PTAB's decision not to institute an *inter partes* review on the '766 patent claims based on Theobald and Shiga highlighted the same omission as that in Dr. Shoemake's obviousness analysis—*i.e.*, ZTE's failure to explain why a person of ordinary skill in the art would modify Theobald to use USB, but disregard the USB specification limits to continue to use the charging current and voltage disclosed for the J3 embodiment. Adickman Decl. Ex. 10 at App. 001071-001072. ZTE's argument that the PTAB's decision is not binding on this Court (Dkt. 195 at 16-17) misses the point. If the PTAB's technically proficient judges could not find even a ***reasonable likelihood*** that the claims of the '766 patent are invalid based on a combination of Theobald and Shiga, then a reasonable lay jury could not find ***clear and convincing*** evidence of invalidity in light of the same evidence. Indeed, ZTE's continued failure to address the very issue underlying the PTAB's non-institution decision strongly suggests that ZTE lacks any meaningful response.

Nor did Dr. Shoemake "evaluate[] the Board's decisions and provide[] detailed analyses of why he disagrees," as ZTE contends (Dkt. 191 at 17). Although Dr. Shoemake acknowledges that the PTAB denied institution of the '766 IPR because the petition failed to explain why a person of ordinary skill in the art would modify Theobald to use USB without modifying the voltages and currents of the corresponding chargers, in response he states only: "While the answers to these questions are clear and powerful, the PTAB apparently found that the Petition failed to document this evidence. I generally agree with ZTE's and its expert's arguments that under FISI's theory of infringement, the Asserted Claims are invalid over the grounds identified in each IPR Petition." Adickman Decl. Ex. 2 (Shoemake Rpt.) at App. 000336 (¶¶ 309-310). These bare, conclusory assertions cannot create a genuine factual dispute for trial.

ZTE has failed to show that key limitations in the asserted claims are found in Theobald and Shiga, or that Dr. Shoemaker's opinions offer anything more than conclusory opinions based on hindsight. Accordingly, Fundamental respectfully requests that summary judgment should be granted.

IV. CONCLUSION

For the foregoing reasons, Fundamental respectfully requests the Court grant partial summary judgment that the '550 Patent is not invalid, and that the '766 and '111 Patents are not invalid as obvious based on Theobald in combination with Shiga.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on October 3, 2019.

/s/ Jon B. Hyland
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